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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/722,206 | 11/24/2003 | Patrick Ladd | TWAR.001A | 6805 |

7590 10/04/2006

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| EXAMINER | |
|---|---|
| BONZO, BRYCE P | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2113 | |

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/722,206 | LADD ET AL. | |
| | Examiner | Art Unit | |
| | Bryce P. Bonzo | 2113 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *24 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *46 and 47* is/are allowed.

6)☒ Claim(s) *1-4,6-12,14,18,21-33,36,41,48 and 49* is/are rejected.

7)☒ Claim(s) *5,13,15-17,19,20,34,35,37-40,42-45 and 50* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Non-Final Official Action

Status of the Claims

Claims 1-4, 6, 7, 14, 23, 31, 48 and 49 are rejected under 35 USC §102.

Claims 8-12, 18, 21, 22, 24-30, 32, 33, 36 and 41 are rejected under 35 USC §103.

Claims 5, 13, 15-17, 19, 20, 34, 35, 37-40, 42-45 and 50 are objected to while containing allowable subject matter.

Claims 46 and 47 are allowed.

Rejections under 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6, 7, 31, 48 and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Ben-Natan (United States Patent No. 5,790,779). As per the claims, Ben-Natan discloses:

1. A method of operating client equipment in operative communication with a content-based network, said equipment comprising at least at least a first application, the method comprising:

generating first data relating to the operation of said equipment (column 4, lines 4-24);

receiving, at said first application, said first data (column 6, lines 16-32);

evaluating said first data (column 3, 29-44); and

selectively storing at least a portion of said first data within a storage device (column 3, lines 29-44).

2. The method of Claim 1, wherein said equipment further comprises a second application, said second application initiating said act of generating due to at least one event associated with said second application (column 3, lines 2-28 and column lines 4, lines 42 through column 5, line 2).

3. The method of Claim 2, wherein said at least event associated with said second application comprises generating an error selected from the group consisting of: (i) catastrophic errors (column 4, lines 42-column 5, lines 2); and (ii) recoverable errors.

4. The method of Claim 2, wherein said at least one event is taken from the group consisting of: (i) informational message types (column 4, lines 42-column 5, lines 2); (ii)

recoverable error types; (iii) catastrophic error types; (iv) reboot events; and (v) resource depletion events.

6. The method of Claim 2, wherein said act of evaluating said first data comprises:

determining the priority of said at least one event (column 3, lines 29-52); and

selectively initiating at least one action based on said determined priority (column 3, lines 29-52).

7. The method of Claim 6, wherein said act of selectively initiating at least one action comprises generating a message for transmission to another entity (column 3, lines 29-52).

31. A method of operating a cable network having a plurality of client device operatively coupled thereto, the method comprising:

distributing at least one software application to each of said plurality of devices (inherent as the software is clearly present as disclosed);

providing at least one monitor entity on each of said devices (column 14, lines 42-65);

monitoring the operation of said at least one software application with respective ones of said monitor applications (column 4, lines 42-65);

detecting events associated with said operation of said software applications (column 4, lines 42-65); and

responsive to said detecting, logging a plurality of data relating to said events within said devices for subsequent use (column 3, lines 29-44).

48. CPE for use in a content-based network, said CPE comprising an event handling system adapted to automatically log data relating to one or more events occurring within said CPE during operation and make such data available to a network agent (columns 3 and 4).

49. The CPE of Claim 48, wherein said event handling system comprises:

(i) middleware adapted to register for and receive event notifications (column 6, lines 16-32); and

(ii) a storage device adapted to store said data (column 6, lines 16-32);

wherein said middleware is further adapted to selectively analyze said event notifications to identify said data to be stored within said storage device (column 3, lines 29-44).

Claims 14 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by LeDuc (United States Patent Application Publication 2006/0143492 A1). As per the claims LeDuc discloses:

14. CPE adapted for operation within a content-based network, said CPE comprising at least one resource, a first entity adapted to control at least one function

within said CPE, and a plurality of software applications, said CPE operating according to the method comprising;

evaluating said at least one resource using said first entity (¶20); and

in response to said act of evaluating, selectively controlling the operation of one or more of said plurality of applications (¶45).

23. Consumer premises apparatus adapted for operation within a cable network, said apparatus comprising:

a processor (Inherent);

storage device operatively coupled to said processor (inherent);

a monitor application running on said processor and adapted to control at least one function within said apparatus (¶45); and

at least one software application adapted to run on said processor (¶45);

wherein said monitor application is configured to:

(a) identify an event occurring within said apparatus (¶20-21); and

(b) selectively control the operation of said at least one software application in response thereto (¶45).

Rejections under 35 USC §103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ben-Natan.

As per claim 8, Ben-Natan does not explicitly disclose:

wherein the network comprises a multi-channel distribution network of the hybrid fiber coax (HFC) type.

Official Notice is given that this type of network is notorious well known to be used in advanced computer networks. HFC provides the designer with the ability to run large amount of data of long distances, ideal for video distribution. Ben-Natan is clearly concerned with monitoring remote installations with a centralized control system. This form of network is one which is ideally implemented in HFC. Thus it would have been obvious to implement the remote network error handling system of Ben-Natan into a HFC network, thus allowing a cable operator to handle the volume of errors in an automated manner.

As per claim 33, Ben-Natan does not explicitly disclose:

said software process being adapted to selectively interface with at least one client device and retrieve logged error data therefrom.

Official Notice is given that the technique of polling is well known in the communication arts. Polling is a system were a server individually polls each element of a network to gather data. Polling offers the advantage that the data is only provided

when requested. As such the server will not be over burdened by a flood of device data and unable to process it all. Additionally, the server only receives data in general when it wishes the data. Thus it would have been obvious to one of ordinary skill in the art to implement the System of Ben-Natan as a polling system to ensure the server only received data whet it was available to process it.

Claims 9-12, 21, 22, 24-30, 32, 36 and 41 rejected under 35 U.S.C. 103(a) as being unpatentable over Ben-Natan in view of LeDuc.

As per claim 9, Ben-Natan discloses:

A method of operating CPE within a content-based network, said CPE comprising a resource, a first entity adapted to communicate with another network entity, and plurality of software applications, the method comprising;

evaluating said resource using said first entity (column 3, lines 29-44).

Ben-Natan does not disclose, but LeDuc teaches:

in response to said act of evaluating, selectively controlling the operation of one or more of said plurality of applications (¶45).

Ben-Natan discloses a error reporting and logging system for use in a network, which is then used to "troubleshooting" in an unspecified manner. Ben-Natan provides for a centralized control of the data and logging, with enhanced logging capabilities

including thresholds, duplicates and floods. Ben-Natan expresses a clear need a for a follow-up reaction to the error, but does not explicitly detail this troubleshooting. LeDuc discloses a system which operates a threshold based logging system which incorporates rule based reasoning to control the device once the error levels reach prescribed levels. LeDuc merely defines components as to the their physical relationship and as such, cannot on its own disclose a remote destination for error reports, but does provide the details for how such data is processed. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the network based features of Ben-Natan into the error logging and correction system of LeDuc, thus creating a network-centric logging system which not only creates logs but acts on the source of the logged problems, easing the burden on human staff.

As per claims 10-12, LeDuc discloses:

10. The method of Claim 9, wherein said act of evaluating comprises comparing a parameter associated with said resource to a predetermined value, and said act of selectively controlling comprises utilizing at least a result of said act of comparing to initiate destruction of said one or more applications (¶45).

11. The method of Claim 10, wherein said act of comparing to a predetermined value comprises accessing a stored profile of said CPE, said profile comprising said predetermined value (¶37).

12. The method of Claim 9, wherein said act of evaluating comprises evaluating the requirements of said resource by said one or more applications, and said act of selectively controlling comprises utilizing at least a result of said act of evaluating to initiate destruction of said one or more applications (¶45).

As per claim 14, LeDuc fails to disclose, but Ben-Natan does teach:

18. The CPE of Claim 14, wherein at least a portion of said plurality of applications are downloaded to said CPE from time to time via an external network interface (column 3, lines 29-52).

Ben-Natan discloses a error reporting and logging system for use in a network, which is then used to "troubleshooting" in an unspecified manner. Ben-Natan provides for a centralized control of the data and logging, with enhanced logging capabilities including thresholds, duplicates and floods. Ben-Natan expresses a clear need a for a follow-up reaction to the error, but does not explicitly detail this troubleshooting. LeDuc discloses a system which operates a threshold based logging system which incorporates rule based reasoning to control the device once the error levels reach prescribed levels. LeDuc merely defines components as to the their physical relationship and as such, cannot on its own disclose a remote destination for error reports, but does provide the details for how such data is processed. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to

incorporate the network based features of Ben-Natan into the error logging and correction system of LeDuc, thus creating a network-centric logging system which not only creates logs but acts on the source of the logged problems, easing the burden on human staff.

As per claim 21, LeDuc fails to disclose, but Ben-Natan does teach:

21. The CPE of Claim 14, wherein said act of evaluating is performed substantially in response to an event notification provided to said first entity (column 3, lines 29-44).

Ben-Natan discloses a error reporting and logging system for use in a network, which is then used to "troubleshooting" in an unspecified manner. Ben-Natan provides for a centralized control of the data and logging, with enhanced logging capabilities including thresholds, duplicates and floods. Ben-Natan expresses a clear need a for a follow-up reaction to the error, but does not explicitly detail this troubleshooting. LeDuc discloses a system which operates a threshold based logging system which incorporates rule based reasoning to control the device once the error levels reach prescribed levels. LeDuc merely defines components as to the their physical relationship and as such, cannot on its own disclose a remote destination for error reports, but does provide the details for how such data is processed. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the network based features of Ben-Natan into the error logging and correction system of LeDuc, thus creating a network-centric logging system which not

only creates logs but acts on the source of the logged problems, easing the burden on human staff.

As per claim 22, Ben-Natan discloses:

22. The CPE of Claim 21, wherein said event notification is generated by a software object adapted to handle a plurality of different event types (column 3, lines 29-53).

As per claim 44, LeDuc fails to disclose, but Ben-Natan does teach:

24. The apparatus of Claim 23, further comprising a network interface operatively coupled to said processor;

wherein said monitor application is further adapted to communicate with an external entity via said interface (column 6, lines 15-32).

Ben-Natan discloses a error reporting and logging system for use in a network, which is then used to "troubleshooting" in an unspecified manner. Ben-Natan provides for a centralized control of the data and logging, with enhanced logging capabilities including thresholds, duplicates and floods. Ben-Natan expresses a clear need a for a follow-up reaction to the error, but does not explicitly detail this troubleshooting. LeDuc discloses a system which operates a threshold based logging system which incorporates rule based reasoning to control the device once the error levels reach prescribed levels. LeDuc merely defines components as to the their physical relationship and as such, cannot on its own disclose a remote destination for error reports, but does provide the details for how such data is processed. Thus it would

have been obvious to one of ordinary skill in the art at the time of invention to incorporate the network based features of Ben-Natan into the error logging and correction system of LeDuc, thus creating a network-centric logging system which not only creates logs but acts on the source of the logged problems, easing the burden on human staff.

As per claims 25-27, Ben-Natan and LeDuc disclose:

25. The apparatus of Claim 24, wherein said monitor application is further adapted to receive control input from said external entity (column 6, lines 15-32).

26. The apparatus of Claim 24, wherein said monitor application is further adapted to generate event messages and transmit them to said external entity (column 6, lines 15-32).

27. The apparatus of Claim 24, wherein said monitor application is further adapted to store a plurality of data relating to said event within said storage device, said data being accessible to said external entity (column 6, lines 15-32).

As per claim 28-30, LeDuc fails to disclose, but Ben-Natan does teach:

28. Fault-tolerant CPE adapted for coupling to a cable network, said CPE having a monitor application running thereon (column 4, lines 4-24), said monitor application being adapted to (i) detect at least one event relating to the operation of one or more

software applications running thereon (column 4, lines 4-24); (ii) selectively log data relating to said event for subsequent use (column 3, lines 29-44); and (iii) control the operation of said CPE based at least in part on said at least one detected event (LeDuc ¶45).

Ben-Natan discloses a error reporting and logging system for use in a network, which is then used to "troubleshooting" in an unspecified manner. Ben-Natan provides for a centralized control of the data and logging, with enhanced logging capabilities including thresholds, duplicates and floods. Ben-Natan expresses a clear need a for a follow-up reaction to the error, but does not explicitly detail this troubleshooting. LeDuc discloses a system which operates a threshold based logging system which incorporates rule based reasoning to control the device once the error levels reach prescribed levels. LeDuc merely defines components as to the their physical relationship and as such, cannot on its own disclose a remote destination for error reports, but does provide the details for how such data is processed. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the network based features of Ben-Natan into the error logging and correction system of LeDuc, thus creating a network-centric logging system which not only creates logs but acts on the source of the logged problems, easing the burden on human staff.

As per claims 29 and 30, LeDuc discloses:

29. The CPE of Claim 28, wherein said monitor application is further adapted to communicate with an external entity, said external entity and said monitor application cooperating to selectively control the operation of said CPE (¶45)

30. The CPE of Claim 29, wherein said event comprises a resource depletion event, and said act of controlling the operation of said CPE comprises selectively suspending or destroying at least one of said software applications in order to mitigate said resource depletion (¶45).

As per claim 32, Ben-Natan discloses:

32. A method of operating a multi-channel cable network having a plurality of client devices operatively coupled thereto, the method comprising:

distributing at least one software application to each of said plurality of devices (inherent);

providing at least one monitor entity on each of said devices(column 3, lines 29-44);

monitoring the operation of said at least one software application with respective ones of said monitor applications to detect events associated with said operation of said software applications(column 3, lines 29-44);

responsive to said detecting of at least one event, alerting an external entity of said event (column 3, lines 29-44).

Ben-Natan does not disclose, but LeDuc teaches:

responsive to said alerting, initiating corrective action for said event (¶45).

Ben-Natan discloses a error reporting and logging system for use in a network, which is then used to "troubleshooting" in an unspecified manner. Ben-Natan provides for a centralized control of the data and logging, with enhanced logging capabilities including thresholds, duplicates and floods. Ben-Natan expresses a clear need a for a follow-up reaction to the error, but does not explicitly detail this troubleshooting. LeDuc discloses a system which operates a threshold based logging system which incorporates rule based reasoning to control the device once the error levels reach prescribed levels. LeDuc merely defines components as to the their physical relationship and as such, cannot on its own disclose a remote destination for error reports, but does provide the details for how such data is processed. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the network based features of Ben-Natan into the error logging and correction system of LeDuc, thus creating a network-centric logging system which not only creates logs but acts on the source of the logged problems, easing the burden on human staff.

36. An error logging system adapted for use on a consumer electronics device,

comprising:

an event registration entity (column 3, lines 29-44);

an event submission entity (column 3, lines 29-44);;

an event database (column 3, lines 29-44);

a priority event reporting entity (column 3, lines 29-44);

a network retrieval entity (column 6, lines 16-32);

Ben-Natan does not disclose, but LeDuc teaches:

a resource depletion registration entity (¶25).

Ben-Natan discloses a error reporting and logging system for use in a network, which is then used to "troubleshooting" in an unspecified manner. Ben-Natan provides for a centralized control of the data and logging, with enhanced logging capabilities including thresholds, duplicates and floods. Ben-Natan expresses a clear need a for a follow-up reaction to the error, but does not explicitly detail this troubleshooting. LeDuc discloses a system which operates a threshold based logging system which incorporates rule based reasoning to control the device once the error levels reach prescribed levels. LeDuc merely defines components as to the their physical relationship and as such, cannot on its own disclose a remote destination for error reports, but does provide the details for how such data is processed. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the network based features of Ben-Natan into the error logging and correction system of LeDuc, thus creating a network-centric logging system which not

only creates logs but acts on the source of the logged problems, easing the burden on human staff.

Claim 41 is rejected as being the method of claim 32.

Allowable Subject matter

Claims 5, 13, 15-17, 19, 20, 34, 35, 37-40, 42-45 and 50 are objected while containing allowable subject matter. The unique nature of each combination in conjunction with its claimed environments overcomes the prior art.

Claims 46 and 47 are allowed. The unique nature of each combination in conjunction with its claimed environments overcomes the prior art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryce P. Bonzo whose telephone number is (571)272-3655. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bryce P. Bonzo

Bryce P Bonzo
Primary Examiner
Art Unit 2113